

ENSIR

45 O Park, Blen Road, Suite 210, St. Louis Park, Minnesota, 55416-4889, 1917, 924, 1117, F 952,924,0317, www.enshaecom.com.



April 14, 2008

Darryl Owens
Regional Administrator
United States Environmental
Protection Agency, Region 5
Mail Code HSR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604

President
Reilly Industries, Inc.
300 North Meridian Street, Suite 1500
Indianapolis, Indiana 46204-1763

Via Certified U.S. Mail

Nile Fellows Project Manager Superfund Unit #1 Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155

Subject: United States of America, et al. vs. Reilly Tar and Chemical Corporation, et al. File No. Civ. 4-80-469; CD-RAP Section 7.4

Prairie du Chien – Jordan aquifer Gradient Control Plan

Gentlemen:

This letter provides a revised work plan for the Prairie du Chien – Jordan Aquifer. The original work plan was provided to the Minnesota Pollution Control Agency and the U.S. Environmental Protection Agency (the Agencies) on January 22, 2008. The City of St. Louis Park (City) met with the Agencies via conference call on March 27, 2008 to discuss the Agencies' concerns and comments. The Agencies requested that this work plan evaluate primarily the horizontal flow in the Prairie du Chien – Jordan Aquifer and not evaluate the vertical flow with overlying aquifers at this time. The horizontal evaluation does not include the temporary cessation of groundwater pumping in the shallower aquifers, as discussed in the January 22, 2008 work plan. Other elements of the January 22, 2008 remain unchanged, as summarized below.

Scope of Work and Schedule

The overall strategy for ensuring the integrity of the PCJ gradient control system consists of three steps:

- 1. Assess current conditions.
- 2. Monitor groundwater to determine plume location and movement, and
- 3. Provide additional pumping (e.g., at wells SLP6, W119, or W48) if needed.

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Table 1 presents a step by step summary of the work scope and schedule. Current conditions will be assessed with the aid of new data collection and groundwater modeling. The new data to be collected includes six months of continuous water level measurements in available PCJ wells (see Table 2). These water level measurements during pumping and static conditions will be analyzed to determine aquifer parameters for the groundwater model, and a better record of local groundwater flow directions.

The six months of water level data will be shared with the Agencies and will be used to map heads over time, calculate aquifer parameters, and update the model. The City understands that additional modeling may be done by the Agencies using the updated information to evaluate the effectiveness of PCJ gradient control on the Reilly plume. As such, it will be a collaborative effort to evaluate the existing conditions and determine the need for system modification. The City anticipates submitting a report (Task 5) that either describes a specific plan for gradient control modifications, or a description of current conditions that indicates modifications are not needed, within 60 days of the final modeling results.

As indicated in Table 1, Task 6, the model may also be used to evaluate the potential need for additional PCJ monitoring well(s). If necessary, monitoring well locations that would provide an early warning of PAH migration to Edina will be assessed. The City will install one or more additional monitoring wells within 60 days of the Agencies' approval of the Task 5 report. If the groundwater monitoring data indicate a PAH problem for Edina, then the most immediate action would be to start pumping at well SLP6, with discharge to Minnehaha Creek. Further modifications could then be considered, such as, treating the SLP6 discharge, or pumping at W48 or W119.

Other than the wells identified in the 2008 Sampling Plan, no additional PCJ Aquifer monitoring wells are known to be available in appropriate locations for sampling to assist in this investigation. However, one potential well was identified on the County well index that may provide useful water quality and water level information. That well has Minnesota unique number 227132 and appears to be located in the vicinity of the Thermo-Tec facility in Hopkins. The City requests assistance from the agencies in determining if this is a viable PCJ Aquifer monitoring well.

The City is prepared to move ahead with this program at the schedule indicated in Table 1, and looks forward to working with the Agencies to resolve this issue prior to the next Reilly Site Five-Year Review. Please contact this office if you have any questions regarding this submittal.

Sincerely,

ENSR Corporation

William M. Gregg Project Leader for the City of St. Louis Park

Enclosures

cc: Scott Anderson, City of St. Louis Park

William M. Fregg

Table 1 Summary of Prairie du Chien - Jordan Aquifer Gradient Control Plan

| Task | Task Description | Schedule | Task Lead | Projected Dates* |
|------|--|--|----------------------|---|
| 1 | Equip PCJ wells with transducers | Within two months of Plan approval | City | 14-Jul-08 |
| 2 | Collect continuous water level data (Opportunities for PCJ aquifer tests) | For a duration of six months after pumping cessation | City | 7/14/08 to 1/14/09 |
| 3 | Utilize water level data to determine aquifer parameters, new model input, and PCJ impacts on shallower aquifers | One to two months after Task 2 | City and Agencies | 14-Feb-09 |
| 4 | Conduct additional modeling runs and report | Two to four months after Task 2 | Agencies | 14-Mar-09 |
| 5 | Assess modeling results and prepare recommendations for changing PCJ gradient control system, if needed | Within two months of the final modeling results | City | 14-May-09 |
| 6 | If modeling indicates that gradient control is not effective, design and install additional monitoring wells | Within two months of deciding to install wells (and Agencies' approval) | City | Summer 2009 |
| 7 | If groundwater monitoring indicates a potential PAH problem in Edina, institute groundwater pumping at SLP6 | Within one month. Other pumping scenarios could be considered, but SLP6 can be started up the quickest | City | Within one month of the receipt of the data |

^{*} Assumes Agencies approve this plan one month after its submittal (i.e., May 14, 2008).

Table 2
Candidate PCJ Wells for Water Level Transducers

| Aquifer | Well ID* | Description | Priority Wells** |
|---------|----------|---------------------|------------------|
| PCJ | SLP4 | Municipal well | Yes |
| PCJ | SLP5 | Municipal well | 103 |
| PCJ | SLP6 | Municipal well | Yes |
| PCJ | SLP7 | Municipal well | 100 |
| PCJ | SLP8 | Municipal well | |
| PCJ | SLP10 | Municipal well | • |
| PCJ | SLP14 | Municipal well | |
| PCJ | SLP15 | Municipal well | Yes |
| PCJ | SLP16 | Municipal well | |
| PCJ | E2 | Municipal well | Yes |
| PCJ | E3 | Municipal well | |
| PCJ | E4 | Municipal well | |
| PCJ | E5 | Municipal well | |
| PCJ | E6 | Municipal well | |
| PCJ | E7 | Municipal well | |
| PCJ | E8 | Municipal well | |
| PCJ | E11 | Municipal well | |
| PCJ | E13 | Municipal well | Yes |
| PCJ | E14 | Municipal well | |
| PCJ | E15 | Municipal well | Yes |
| PCJ | E16 | Municipal well | |
| PCJ | E17 | Municipal well | |
| PCJ | E18 | Municipal well | |
| PCJ | H1 | Municipal well | |
| PCJ | H4 | Municipal well | |
| PCJ | H5 | Municipal well | |
| PCJ | H6 | Municipal well | Yes |
| PCJ | MTKA6 | Municipal well | Yes |
| PCJ | MTKA9 | Municipal well | |
| PCJ | W23 | Reilly well | Yes |
| PCJ | W29 | Flame Industries | Yes |
| PCJ | W32 | Texatonka Mall | |
| PCJ | W48 | Methodist Hospital | Yes |
| PCJ | W119 | Meadowbrook GC | |
| PCJ | W401 | Interlachen CC | Yes |
| PCJ | W402 | Reilly well | Yes |
| PCJ | W403 | Reilly well | Yes |
| PCJ | W406 | Minnekahda Club | Yes |
| PCJ | 227132 | Thermo-Tec?? | Yes |
| PCJ | 748656 | STS/Edina Test Well | |

Notes:

^{*}Wells highlighted in **Bold** are currently equipped with transducers.

^{**}Priority wells are considered to be in the best locations to provide water level data. The City will enlist Agency assistance to equip these wells with transducers - if necessary.

The remaining wells represent all PCJ wells identified in the study area.